



# Spark Gap

Vol. 35, Issue 9, September 2018 *MARC - Serving Central Indiana Communities for thirty-five years*

## ***On Our MARC:***

Another year has come to an end for the club this month. Where has the time is gone?

I'd like to thank Rhonda Curtis, Marlys Barr, Ron Schuetz and Chris Frederick for a great job. I would also like to thank the IT Team for working hard on getting our Website up to date and the PIO Team for getting our name out to the public. Thanks to Bob LaGrange for serving as editor-in-chief of the Spark Gap. Thanks to the membership for all the support that you have given the club.

The month of Sept was supposed to be Heartnut month but due to the weather, it was canceled. Seems the rain wanted to come to the event and ruin the day.

If you were not at the August meeting, no office was running unopposed so no ballots were sent needed. Your new officers are as followed:

President- Jacki Frederick-KI6QOG  
Vice President-Bill Jackson-KM6CRL  
Secretary-Rhonda Curtis-WS9H  
Treasurer-Ron Schuetz-K9THR  
Trustee-Chris Frederick-KQ9Y

Just a reminder, that our yearly picnic is Sept 15<sup>th</sup> at Steve Brown's house. Club will provide the meat, lemonade, ice tea and water. Please bring a side dish and chairs. This is a family event, so please bring the spouse and kids!! Hope to see everyone there.

*Jacki - KI6QOG*

***President***





*Birthday's for the month of September:*

*KD9BBU - James Smith*

*W9DBA - Scott Nelson*

*KA9YKN - William Spann*

*KD9IZY - Tracy Walker*

ROANOKE VALLEY AMATEUR RADIO CLUB				
PO Box 2002, Roanoke, VA 24009				
	<b>W4CA</b>			
BLUE RIDGE BONANZA				
CONFIRMING QSO WITH		DAY	MONTH	YEAR
UTC	MHz	RST	MODE	QSL
<b>Special Event Station</b>				
Commemorating the beginning of construction of the Blue Ridge Parkway in September, 1935 A 469 mile scenic road running along the spine of the Blue Ridge Mountains through Virginia and North Carolina				

## Blue Ridge Bonanza

**Sep 29, 1400Z-2100Z, W4CA,**

Roanoke, VA. Roanoke Valley ARC. 14.260 7.260. QSL. Roanoke Valley ARC (W4CA), P.O. Box 2002, Roanoke, VA 24009.  
Commemorating the beginning of construction on the Blue Ridge Parkway, September 1935.

ROANOKE VALLEY AMATEUR RADIO CLUB [www.w4ca.com](http://www.w4ca.com)

# Radio Shack Is Back !



Hobby Town, new location for Radio Shack

Thanks to many the electronic project builders who let Radio Shack know their parts inventory would be missed. In response the Radio Shack folks have worked out a deal to sell components through selected brick and mortar outlets like Hobby Town. The closest outlet is in the Target strip mall at Southport and Emerson. The store is located just west of the Target store between Kohl's and Home Depot.

According to the store manager they have about 500 components plus soldering irons and other limited project items. He said Radio Shack will be sending them audio and maybe video connectors and supplies in the near future. Stop by, tell them you're a ham from the area and let the manager know what type of connectors or components you might be needing. You can also order on line from Radio Shack or from other parts outlets like Debco Electronics in Cincinnati. Debco is a regular at local hamfests and usually have what I need. But, its always nice to run to the local Radio Shack and avoid the two day shipping delay when finishing a project.

..... *Jack w8ish*



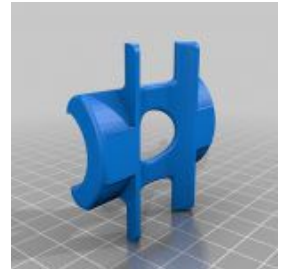
<https://www.radioshack.com>

## 3D printed parts for ham radio

By Dan Romanchik, KB6NU

One of the things that I keep telling myself that I need to learn how to do is 3D printing. This morning, I ran across a couple more 3D printing projects for ham radio that I thought I'd pass along.

The first I found on reddit: 3D Printed Parts for Portable Tape Measure Yagi Designs ([https://www.reddit.com/r/amateurradio/comments/963br3/3d\\_printed\\_parts\\_for\\_portable\\_tape\\_measure\\_yagi/](https://www.reddit.com/r/amateurradio/comments/963br3/3d_printed_parts_for_portable_tape_measure_yagi/)). The summary on Thingiverse (<https://www.thingiverse.com/thing:3042505>), which is a website where “makers” share their designs, says:



These parts are made for use with 1-in. PVC pipe and 1-in. Harbor Freight tape measure steel. You can use electrical tape to attach the element holders to the side of the pipe, and use the driven element bridge to give structural rigidity across the driven dipole element. I have used this with up to 5 elements on 2m with good success. When not using the antenna, just pinch the elements to remove them from the holders, and store them INSIDE the tube! you can add some end caps to make this ultra portable. Use these parts with any of the multitude of tape measure YAGI design guides online.

Here's a look at an antenna made with these parts:



The element holders are attached to the boom with electrical tape in the photo above. While I haven't tried it, I'd suggest that the antenna might be a bit more robust if you could screw or perhaps glue the holders to the boom.

There are lots of other cool amateur radio 3D printing projects available on Thingiverse (<https://www.thingiverse.com/search?q=ham+radio&dwh=415b6d8da129c3c>). Browsing through the list quickly, here are just two that look like they might be useful to me:

- Soldering Fingers (<https://www.thingiverse.com/thing:1725308>). This project looks simple and quick.
- µBitx Case (<https://www.thingiverse.com/thing:2925336>). I still gotta do something with the µBitx I bought. This looks like it might get me started.

## Finally getting in gear

Last week, I attended a 3D printing class at our local maker space, All Hands Active ([allhandsactive.org](http://allhandsactive.org)), and now I feel like I can finally attempt a 3D printing project. I'm thinking about starting out with the simple Soldering Fingers project. If that goes well, I'll try a Raspberry Pic case and finally start using that in the shack. And, while these projects all seem pretty cool, I feel like I'm only scratching the surface.

Have any of you 3D printed anything cool for your ham radio projects? Is there another source of designs for ham radio 3D printed stuff besides Thingiverse?

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When he's not 3D printing enclosures for his ham radio projects, Dan blogs about amateur radio, writes exam study guides ([www.kb6nu.com/study-guides](http://www.kb6nu.com/study-guides)), and operates CW on the HF bands. Look for him on 30m, 40m, and 80m. You can email him about your experiences with 3D printing at [cwgeek@kb6nu.com](mailto:cwgeek@kb6nu.com).

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## Greenwood Band Event

It was a perfect Saturday at the Surina Park Amphitheater for music like “Rain Drops keep falling on my Head”, or “Saturday in the Park” and at times the classic 60’s song by Lou Christie came to mind, “Lightning Strikes Me Again”. None of those great songs were heard but our hearty group of Amateur Radio operators could certainly imagine the tunes as seven of Indiana’s community bands came to perform at the outdoor Greenwood Community Band Festival.

Eleven MARC hams endured morning and afternoon rains to help direct the out-of-towners to parking spots at the venue and to a nearby park. Johnson county ARES director Bob LaGrange-N9SIU headed up the ham group. The club repeater was used as well as FRS radios to communicate with band volunteers driving golf carts to deliver band members to the performance staging area. Hotdogs, hamburgers, chips and soft drinks were provided to our group by band members who appreciated the MARC communicators.

Our thanks to everyone who weathered the storms. Ron-K9THR, Brenda-KC9EBL, John-KF6EFG, Phil-AE9H, Wilson-KD9FBC, Nelson-W9DBA, Dave-KB9LOT and Mike-KC9WLR who monitored incoming weather and provided weather warnings. Jack-W8ISH assisted Bob with Net Control. Bob-N9SIU wore two hats. He organized the amateurs and then switched hats to play his horn with the Greenwood Community band. MARC Club member Jim Williams-N9EJR performed with the Crossroads Brass Band.

Despite the inclement conditions the amphitheater event drew a fairly large crowd throughout the afternoon and made our efforts as Amateur Radio communicators even more valuable.

-Jack w8ish





Scott W9DBA, ready for the rain



Ron K9THR, rain ready



John KF6EFG, amphither



Jack W8ISH, checking out his FRS radio



Wilson KD9FBC & Bob N9SIU ready to start



Brenda KC9ELB, on location

..... *Thank you Jack W8ISH for the pictures.*

# **IARU Region 1 Monitoring System Reports Disappearance of Two 40-Meter Broadcast Intruders**

The IARU Region 1 Monitoring System (IARUMS) reports that two long-time broadcast intruders on 40 meters are gone. IARUMS Coordinator Wolf Hadel, DK2OM, said in the August IARUMS newsletter that Radio Hargeisa in the Republic of Somaliland on 7.120 MHz, and Radio Ethiopia on 7.140 MHz, departed the band during the last week of August. “We did not miss them,” he commented.

IARUMS did report increasing military traffic on 7 and 14 MHz, “especially on digital modes from Russia and China.” In addition, a wideband over-the-horizon (OTH) radar in China has caused serious problems on 20 meters, while an Iranian radar on 28.860 MHz “could be heard under sporadic E conditions.” German telecommunications authorities have filed a formal complaint.

Hadel said a Russian Navy system believed to be in Moscow appeared on 7.182 MHz on F1A, a 200 Hz shift, identifying as RDL. German telecommunications authorities were notified. Hadel also reported “childish behaviour” by hams in western and eastern Ukraine “insulting each other or playing music every day” on 7.055 MHz (LSB). Reports of amateur band intruders can be submitted via the IARU Region 1 Monitoring System Logger.

..... *ARRL News, September 2018*

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## **BUY, SELL or TRADE**

W8ISH EQUIPMENT FOR SALE –

Alpha Delta “No Trap” Multi-band dipole. 80-10- meters. No power limits. 82 foot long. Like New. Asking \$75.00.

Cushcraft A432-20T UHF crosspole Yagi antenna. It has 14 Elements for UHF for satellite or other UHF high gain needs. Asking \$50.00

Alliance heavy duty antenna rotor with 75 feet of 4-pin control cable. Asking \$60.00

For Info call Jack, W8ISH at 317-881-0817

## **ARRL Headquarters Emergency Response Team to Activate on September 12**

The ARRL Headquarters Emergency Response Team will activate today (September 12), ARRL Emergency Response Manager Mike Corey, K11U, has announced, as what the National Hurricane Center (NHC) is calling “dangerous Hurricane Florence” heads toward the southeastern US coast, where it’s “expected to bring life-threatening storm surge and rainfall to portions of the Carolinas and Mid-Atlantic states.

ARRL shipped seven Ham Aid kits to South Carolina by way of Georgia on September 11 to assist with emergency preparedness needs in advance of Hurricane Florence. These kits are the same ones that ARRL volunteers took to Puerto Rico a year ago to assist with disaster communications following Hurricane Maria.

“South Carolina ARES is fully activated,” ARRL South Carolina Section Emergency Coordinator Billy Irwin, K9OH, told ARRL, adding that he’s been coordinating regularly with the state Emergency Management Division. “We have operators serving 12-hour shifts at the SC Emergency Management Division and will move to 24-hour coverage on Thursday. Two operators have been deployed to Berkeley County to assist with shelter operations at the request of the Emergency Coordinator there.” Irwin said information about frequencies in use is in the Tactical Guide on the South Carolina ARES website.

“We are literally modifying plans on the fly to meet the needs of the mission,” Irwin added. “Several ARRL Sections have offered assistance.”

The Hurricane Watch Net (HWN), now at Alert Level 3, is closely monitoring three systems, Hurricane Florence, Tropical Storm Isaac, and Invest 95L, currently in the Gulf of Mexico. The net has shifted its formal activation to Thursday, September 13, at 1300 UTC, as Florence closes in on the US east coast. The net will activate on both its 14.325 MHz and 7.268 MHz frequencies and remain active around the clock, as needed. “Hurricane Florence is drawing a lot of concern for its size and strength, but more so for the potential flooding,” Assistant HWN Manager Stan Broadway, N8BHL, said.

HWN stations will be on both frequencies throughout the day and evening on Wednesday, September 12, to talk with stations in the coastal states. “We want to log their locations, their weather instrumentation and other pertinent information, so that when they are actively producing storm reports we already have them in the database,” Broadway said. “This will speed the reporting process Thursday and Friday as the storm does make landfall.”

WX4NHC at the National Hurricane Center will remain active through Friday, September 14, operating cooperatively with the HWN as net stations funnel ground-level reports to the Center. WX4NHC will monitor the HWN and the VoIP Hurricane Net (VoIPWX) on EchoLink Conference WX-Talk, node 7203 or IRLP 9219.

As of 1200 UTC, the NHC said Florence was some 530 miles southeast of Cape Fear, North Carolina, with maximum sustained winds of 130 MPH, moving to the west-northwest at 17 MPH.



SHARES will maintain watch on its Northeast Region (FEMA Regions 1, 2, and 3) and Southeast Region (FEMA Region 4) nets starting at 2100 UTC on Thursday, September 13, and on its National Net channels starting at 1200 UTC on Friday, September 14.

The Salvation Army Team Emergency Network (SATERN) has announced plans to activate for Hurricane Florence from 1700 through 2100 UTC on Thursday, September 13, on 14.265 MHz with a backup frequency of 14.312 MHz. It will reactivate on Friday and Saturday at about 1600 UTC until propagation no longer supports it or the Net Manager closes the net for the day.

SATERN may extend its activation depending on reports of major damage, especially to the communications infrastructure; continued significant emergency, priority, or health-and-welfare traffic, as well as reports of an increased need for auxiliary communication. The net's primary mission will be the receipt and delivery of outbound health-and-welfare messages from affected areas. The Salvation Army is beginning to stage personnel and equipment in major deployments to North Carolina and Virginia.

The ARRL Pacific Section is preparing for activation to support a response to Tropical Storm Olivia. ARRL deployed seven Ham Aid HF kits to Hawaii for Hurricane Lane, and these will remain in Hawaii through the remainder of the hurricane season. Amateur Radio operators on Guam are active supporting response to Typhoon Mangkhut.

AMSAT-NA has announced plans to AO-92 to attempt to image Hurricane Florence. AMSAT Vice-President of Operations, Drew Glasbrenner, KO4MA, said this week that plans call for using the camera on AO-92 to try imaging Hurricane Florence during North American east coast passes on Thursday, September 13, and Friday, September 14. AO-92 will not be in U/V FM voice transponder operation during these passes. Ground stations should standby and not attempt to access AO-92 during this period. The high-speed image data will be transmitted on a downlink frequency of 145.880 MHz and can be captured, decoded, and uploaded to the Fox-1 data warehouse using *FoxTelem* version 1.06 software.

..... ARRL News, September 2018



## **UP – COMING ACTIVITIES AND HAMFESTS**

**09/08/2018** – Time TBA Heartnut Festival Johnson County Park

**09/15/2018** – 1100 MARC Monthly meeting at the Steve Brown (N9LC) Ranch Franklin

**10/20/2018** – 0800 MARC Monthly meeting at the Johnson County REMC.

Johnson County REMC 750 International Drive Franklin, IN 46131.

**11/17/2018** – 0800 MARC Monthly meeting at the Johnson County REMC.

Johnson County REMC 750 International Drive Franklin, IN 46131.

**12/15/2018** – 0800 MARC Monthly meeting at the Johnson County REMC.

Johnson County REMC 750 International Drive Franklin, IN 46131.

**01/19/2019** -- 0800 MARC Monthly meeting at the Johnson County REMC.

Johnson County REMC 750 International Drive Franklin, IN 46131.

## **CLUB DUES FOR 2018**

**It** is that time of year to pay your dues or become a member of the  
Mid-State Amateur Radio Club.

The dues are still \$18.00 and they have remained that amount for many years.  
This also a good time to update any of your information for club records such as  
licence upgrade, change of address or call sign.

This is also a good opportunity for new amateurs to join our club and be part of  
our club activities.

Please see Ron, K9THR or Jacki, KI6QOG  
*M.A.R.C. Treasurer*



## MID-SATE AMATEUR RADIO CLUB

The Mid-State Amateur Radio Club meets the **THIRD SATURDAY** of each month at the Johnson County REMC 750 International Drive Franklin, IN 46131.

See our website, [www.midstatehams.org](http://www.midstatehams.org), for maps on how to get to our meeting.

Everyone is welcome; you do not have to be a *HAM* to attend our meetings or a member of the club.

### WA9RDF Repeater:

146.835/  
146.235 MHz  
(151.4 Hz PL Tone)

### Club Officers:

President: Jacki Frederick – KI6QOG  
Vice President: Ron Schuetz -K9THR  
Secretary: Rhonda Curtis – WS9H  
Treasurer: Ron Scheutz – K9THR /  
Jacki Frederick – KI6QOG  
Repeater Trustee - Chris Frederick – KQ9Y

### WA9RDF Repeater:

443.525/  
448.525 MHz  
(151.4 Hz PL Tone)

Weekly Net: Sunday evening 7:00 PM ARES/RACES members and ALL RADIO AMATEURS  
146.835/146.235 MHz (151.4 Hz PL Tone)

The Official Newsletter of the Mid-State Amateur Radio Club

P.O. Box 836  
Franklin, Indiana  
46131

Spark Gap Editor: Robert LaGrange N9SIU

*Please send your articles to my email: [n9siu@yahoo.com](mailto:n9siu@yahoo.com) no later than the 3rd of the month*



*Special thanks to Johnson County REMC for the use of their community room for meetings and testing.*